Remarks

The present invention is a mobile phone and a method of updating radio channel settings of a mobile phone. In accordance with an embodiment of the invention a mobile phone (1) comprises a receiver for receiving messages transmitted via a mobile phone network, a broadband AM and/or FM radio receiver, a radio channel memory for storing a plurality of radio channel settings received in the messages with the receiver, and a storage for storing a radio channel setting contained in a received message transmitted via the mobile phone network and the radio channel memory. See page 8, lines 31-36 through page 9, lines 1-14.

The present invention provides an alternative to complicated RDS receivers such as described in USP publication 2003/0069032 (Jarvi et al) which has been applied by the Examiner in the rejection of the claims. With the invention, a mobile phone is provided with a broadband AM and/or FM radio signal receiver and a radio channel memory for storing radio channel settings. Messages which are received via a mobile telephone network from which the mobile phone receives service contain a channel setting which may be utilized to receive broadband AM/FM radio station broadcasts.

Claim 26 stands rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 26 has been amended to recite a method as suggested by the Examiner.

Claim 26 stands rejected under 35 USC §102 as being anticipated by USP publication 2003/0069032 (Jarvi et al) and further claims 18, 23, 27, 28, 29, 30, 33, 34 and 35 stand rejected under 35 USC §103 as being unpatentable over Jarvi et al in view of USP 6,181,921 (Konisi et al). These grounds of rejection are traversed for the following reasons.

Claim 18 recites:

A mobile phone comprising a receiver for receiving messages transmitted via a mobile phone network, a broadband AM and/or FM radio signal receiver, a radio channel memory for storing a plurality of radio channel settings of a broadband AM and/or FM radio station received in the messages with the receiver, and a storage for storing a radio channel setting contained in a received message transmitted via the mobile phone network in the radio channel memory.

Jarvi et al discloses a digital mobile terminal system in which a FM radio network 105 transmits a RDS data stream 135 to a digital mobile terminal. Settings which are sent to the digital terminal are stored in a buffer making selection of a service identified by the settings to be immediate. See paragraph [0021]. A radio receiver 410 extracts digital data from the digital data stream which is stored in memory buffer 430. See paragraph [0025].

Moreover, RDS systems of the type described by Jarvi et al are known to be capable of transmitting radio channel information which would permit Jarvi et al for the user of the digital terminal device to obtain links to radio channels.

However, Jarvi et al do not utilize the combination of a mobile telephone and a receiver for receiving messages transmitted via a mobile telephone network, a broadband AM and/or FM receiver and a radio channel memory for storing a plurality of radio channel settings of a broadband AM and/or FM radio station received in the messages with the receiver and a storage for storing a radio receiver and a radio channel setting contained in a received message transmitted via the mobile phone network in the radio channel network. As stated above the claimed invention provides a simple low cost alternative to Jarvi et al system of a digital RDS data terminal 110 and of broadcast radio stations 105 by providing to a user of a mobile phone access to broadband AM and/or FM broadcasts having channel settings contained within messages broadcast by the mobile phone network to the mobile phone.

Claims 18, 23, 27, 28, 29, 30, 33, 34 and 35 stand rejected under 35 USC §103 as being unpatentable over Jarvi et al in view of USP 6,181,921 (Konisi et al). These grounds of rejection are traversed for the following reasons including the deficiencies noted above with respect to Jarvi et al.

First, the examiner's reliance on Konisi et al does not cure the deficiencies noted above with respect to Jarvi et al. Konisi et al has been cited as teaching a radio channel memory for storing a plurality of radio channel settings for each area. However, this teaching is with regard to the tuning to channels as a vehicle moves from one area to another which may be done automatically. See column 3, lines 53-68 through column 4, lines 1-6. While Konisi et al's teachings do have a memory for channels to which a moving vehicle may be tuned which tuning may be automatic in moving from one geographic area to another, this does not suggest the overall combination as set forth in claim 18 of utilization of a mobile phone and in a broadband AM and/or FM radio signal receiver and radio channel memory in which messages are sent via the mobile phone network to the mobile phone which contain channels of broadband AM and/or FM radio stations to which the mobile phone is tuned.

A person of ordinary skill in the art would not be motivated by Konisi et al's storage of channels to which a moving vehicle may be tuned to modify the teachings of Jarvi et al to arrive at the claimed subject matter. Moreover if the proposed combination were made, there still would not be any suggestion of utilization of a mobile phone with messages transmitted via a mobile phone network to tune to a radio receiver in the mobile phone to broadband AM and/or FM radio channels even considering that the RDS system of Jarvi et al is capable of transmitting radio channel information to which RDS receiver could be tuned.

Claims 19 and 24 stand rejected under 35 USC §103 as being unpatentable over Jarvi et al in view of Konisi et al and further in view of Kim. Kim has been cited as teaching a detector for detecting the received message wherein the detector determines a type of content of the message from a data header of the message. However, the teachings of Kim do not cure the deficiencies noted above with respect to Jarvi et al and Konisi et al.

Claim 20 stands rejected under 35 USC §103 as being unpatentable over Jarvi et al in view of Konisi et al, Kim, and further in view of U.S. Publication 2002/0055350 (Gupte et al). Gupte et al has been cited as teaching that users can select from a menu either to listen, save, view details or discard or receive radio channel setting. Gupte et al does not cure the deficiencies noted above with respect to Jarvi et al and Konisi et al.

Claim 21 stands rejected under 35 USC §103 as being unpatentable over Jarvi et al in view of Konisi et al, Kim, Gupte et al and USP 6,470,178 (Cummings-Hill et al). Cummings-Hill et al has been cited as teaching push buttons employed to select program information saved in a memory. However, this does not cure the deficiencies noted above with respect to Jarvi et al and Konisi et al.

Claim 22 stands rejected under 35 USC §103 as being unpatentable over Jarvi et al in view of Konisi et al further in view of USP 6,408,188 (Park). Park has been cited as teaching a transmitter which sends a message to multiple receivers. This does not cure the deficiencies noted above with respect to Jarvi et al and Konisi et al.

Claims 25, 31 and 32 stand rejected under 35 USC §103 as being unpatentable over Jarvi et al, Konisi et al and USP 4,481,382 (Villa-Real). Villa-Real has been cited as teaching time and date of a radio program and a control which activates a broadband AM and/or FM radio receiver and tunes a radio receiver to receive a channel

when the time and date has been reached. However, this does not cure the deficiencies with respect to the combination of Jarvi et al and Konisi et al.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance is respectfully requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, to the Deposit Account of Antonelli, Terry, Stout & Kraus, LLP, Dep. Acct. No. 01-2135 (1149.41027X00), and please credit any excess fees to such deposit account.

Respectfully submitted,
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